LOIS CAPPS
23RD DISTRICT, CALIFORNIA

1707 LONGWORTH HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-0522
(202) 225-3601

COMMITTEE ON
ENERGY AND COMMERCE

COMMITTEE ON THE BUDGET

Congress of the United States
House of Representatives

DI
☐ 1411 MA
SAN LUI
(805) 546-8348

☐ 1216 STATE STREET, SUITE 403
SANTA BARBARA, CA 93101
(805) 730-1710

☐ 141 SOUTH A STREET, SUITE 204
OXNARD, CA 93030
(805) 385-3440

F203

April 19, 2006

Mr. Dwight E. Sanders
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Re: Revised Draft Environmental Impact Report for the Cabrillo Port Deepwater Port
Deepwater Port License Application

Dear Mr. Sanders:

Thank you for this opportunity to comment on the revised draft environmental impact report (DEIR) for the proposed Cabrillo Port Liquefied Natural Gas (LNG) Deepwater Port project. I represent the 23rd Congressional District, in which the proposed onshore facilities and pipelines would be located. And as a member of the House Energy and Commerce Committee, I am very interested in issues relating to LNG siting.

Like many of my constituents, I have been deeply concerned with the Cabrillo Port LNG project because it presents an unacceptable threat to public safety, the environment, and the future economic development of the Central Coast. The public review process, to date, has been insufficient, and failed to adequately account for these concerns. F203-1 F203-2

I am therefore pleased that you have extended the public comment period to May 12th. However, given the scale of this proposal, as well as the complex technical issues, assumptions and models contained in the 2,500-plus page revised DEIR I respectfully request an additional extension to the comment period for the following reasons:

(1) The State Lands Commission (SLC) failed to make available public air emissions, air modeling and air quality impacts data from Cabrillo Port in a timely manner. The lack of data severely hindered the public's ability to adequately review and comment on the revised DEIR. F203-3

(2) Many members of the public that requested copies of the revised DEIR online received their copies of the revised DEIR late, or did not receive them at all. These community members must be given a reasonable amount of time to review and provide the SLC with detailed comments on the impacts of this proposal. F203-4

(3) As you know, the revised DEIR released on March 13th was incomplete. Specifically, the DEIR was missing 22 figures associated with Appendix J3. Despite being notified of the omission, the missing information was not posted to the SLC website until March 22nd. F203-5

F203-1
Sections 4.2.4, 4.2.7.3 and 4.2.8.2 identify agencies with the authority and responsibility for safety standards, design reviews, and compliance inspections. Section 2.1 and Appendix C3-2 identify applicable safety standards.

The lead agencies directed preparation of the Independent Risk Assessment (IRA), and the U.S. Department of Energy's Sandia National Laboratories independently reviewed it, as discussed in Section 4.2 and Appendix C. Section 4.2.7.6 and the IRA (Appendix C1) discuss the models and assumptions used and the verification process. Sandia National Laboratories (Appendix C2) concluded that the models used were appropriate and produced valid results.

The IRA evaluates the consequences of a potential vapor cloud (flash) fire, as discussed in Section 4.2.7.6 and the IRA (Appendix C1). The IRA determined that the consequences of the worst credible accident involving a vapor cloud fire would be more than 5.7 NM from shore at the closest point, as summarized in Table 4.2-1. Figure 2.1-2, Consequence Distances Surrounding the FSRU Location for Worst Credible Events, depicts the maximum distance from the FSRU in any direction that could be affected in the event of an accident. The shape and direction of the affected area within the circle depicted in Figure 2.1-2 would depend on wind conditions and would be more like a cone than a circle, but would not reach the shoreline.

F203-2
Section 1.5 contains information on the public review and comment opportunities provided by the lead agencies in full conformance with the provisions of the law. Both the CSLC and MARAD/USCG have met or exceeded the public notice requirements for this Project (see Sections 1.5.1 and 1.5.3).

In accordance with NEPA and the CEQA regulations, the lead Federal and State agencies have responded specifically to all comments, both oral and written, that concern the Project's environmental issues received during public comment periods. All comments and responses are included in the Final EIS/EIR.

A Revised Draft EIR was recirculated in March 2006 under the CEQA for an additional public review period of 60 days. Sections 1.4 and 1.5.3.2 contain additional information on this topic.

Section 1.1 discusses regulations and agencies involved in the licensing and potential approval of the proposed Project. The USCG and MARAD will hold a final public hearing on the license

with a 45-day comment period before the Federal Record of Decision is issued. The CSLC also will hold a hearing to certify the EIR and make the decision whether to grant a lease.

F203-3
Section 4.6, Air Quality, of the March 2006 Revised Draft EIR and seven of thirty appendices comprise the extensive analyses of the potential impacts of the proposed Project and mitigation to address potential impacts. The included information more than meets the standards for adequacy of an EIR as defined in section 15151 of the State CEQA Guidelines and facilitated a thorough review by both members of the public and public agencies.

The information referenced in the document comprises all files and data used to create the analyses within the March 2006 Revised Draft EIR, all of which was provided to the Environmental Defense Center (EDC) in a timely manner. These data and information enabled the consultant retained by the EDC to replicate the modeling performed for the document's analyses and submit comments by the end of the extended review period.

F203-4
The three individuals who were inadvertently overlooked following their online request for a copy of the document, which was released for public review on March 13, 2006, received copies on or about April 3, 2006. This circumstance was considered in the decision to extend the review period by 15 additional days.

F203-5
As indicated in the response to Comment F203-2, the public comment period was extended to May 12 to provide a 60-day public review period for the March 2006 Revised Draft EIR rather than the 45-day review period required by the State CEQA Guidelines. The information contained on the missing figures in Appendix J3 "Geologic and Geotechnical Evaluation of Proposed Center Road and Line 225 Loop Pipeline Routes for BHP Cabrillo Port Project," which were inadvertently left off the initial CD version of the document, was reflected in the information and analyses contained within the March 2006 Revised Draft EIR. Members of the public had 51 days from the time the figures were posted on the web site to review them. Although errata postcards were mailed to all recipients of the Revised Draft, no one requested copies of the Appendix J3 figures. In addition, all CDs sent to the public following the initial reporting of the matter contained the entirety of the printed document.

I am hopeful you will grant additional time for the public to review this first-of-a-kind project off California's coast.

In my view, there are a number of critical issues that still need to be addressed in the revised DEIR. For example, there are lingering questions about the public's safety, security for LNG and the impact Cabrillo Port will have on our region's air quality and the marine environment. Most significantly, I believe further consideration of the Cabrillo Port project should await the development of a regional plan for LNG facilities.

To date, elected officials and regulators have not thoroughly evaluated our region's plan for LNG in a public manner. Energy companies continue to propose new facilities in California to be used for importing LNG. In fact, earlier this month Tidelands Oil and Gas Corporation became the fifth firm to propose building a LNG terminal off the coast of California.

These proposals have been extremely controversial. Still, they are advancing on a community-by-community basis, and at a rapid pace. As such, they are not part of a coherent strategy for evaluating the overall need for additional capacity in California. Nor are they based on strictly defined criteria for identifying potential sites. This ad-hoc approach does not provide an adequate basis for decision making about individual proposals.

LNG import facilities, like Cabrillo Port, represent substantial long-term commitments of capital and dependence on fossil fuel imports. Therefore, it should not be approved unless there is a clearly demonstrated need, it is built in the right location, and the public's interest is protected through a process that ensures full input.

I will be submitting specific comments and requests for additional analyses to be included in the final EIR prior to the public comment deadline. In the meantime, I encourage you to act deliberatively in this matter, based on a thorough public record in light of our nation's goals of environmental protection, public safety and energy diversity.

Thank you for this opportunity to comment on this proposal.

Sincerely,

Lois Capps

LOIS CAPPS
Member of Congress

F203-5 Continued

F203-6

F203-7

F203-8

F203-5 Continued

F203-6
See the response to Comment F203-1. Table 4.2-2 and Sections 4.2.6.1 and 4.2.7.6 contain information on the threat of terrorist attacks. The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. Section 4.6.1.3 contains a revised discussion of Project emissions and proposed control measures. Section 4.6.4 discusses the health effects attributed to air pollutants and includes revised impacts and mitigation measures. Section 4.7.4 discusses the Project's potential impacts on the marine environment. Section 4.7.4 contains information on impacts on marine biological resources and mitigation measures to address potential impacts.

F203-7
Section 1.1.1 contains information on the process used by the Deepwater Port Act (DWPA) of 1974, as amended, which establishes a licensing system for ownership, construction and operation of deepwater port (DWP) facilities. As discussed, the role of the Maritime Administration (MARAD) is to balance the Congressionally imposed mandates (33 U.S.C. 1501) of the DWPA, including those to protect the environment; the interests of the United States and those of adjacent coastal states in the location, construction, and operation of deepwater ports; and the interests of adjacent coastal states concerning the right to regulate growth, determine land use, and otherwise protect the environment in accordance with law.

At the same time, the California State Lands Commission (CSLC) is reviewing the application to ultimately decide whether to grant the Applicant a lease to cross State sovereign lands. As described in Section 1.2.1, "[t]he CSLC authorizes leasing of State lands to qualified applicants based on what it deems to be in the best interest of the State in compliance with the [California Environmental Quality Act]."

Section 1.1.2 contains information on the Governor of California's role in DWP licensing. As discussed, MARAD may not issue a license without the approval of the Governor of the adjacent coastal state (33 U.S.C. 1503(c)(8)). Section 1.1.3 contains information on the role of the U.S. Environmental Protection Agency (USEPA): "[t]he Port must meet all Federal and State requirements and is required to obtain air and water discharge permits from the USEPA." Section 1.2.1 contains additional information on Federal and State responsibilities. Section 1.1.4 contains information on the

role of the CSLC to consider whether or not to grant a lease of State lands for the subsea pipelines. The lease may also include conditions relating to those parts of the Project not located on the lease premises. As described in Section 1.3.1, one of the main purposes of the EIS/EIR for MARAD is to "(f)acilitate a determination of whether the Applicant has demonstrated that the DWP would be located, constructed, and operated in a manner that represents the best available technology necessary to prevent or minimize any adverse impacts on the marine environment."

The USEPA, the U.S. Department of Commerce, including NOAA's National Marine Fisheries Service (NMFS or NOAA Fisheries Service), and the U.S. Department of the Interior, including the Minerals Management Service and the U.S. Fish and Wildlife Service, are cooperating Federal agencies.

As discussed in Section 1.3.2, for significant impacts, the CSLC must adopt a Statement of Overriding Considerations to approve the Project if the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects (State CEQA Guidelines section 15093(a)). After the CSLC's decision, other State and local agencies may take actions on the Project, i.e., on related permits or necessary approvals. These agencies include the California Public Utilities Commission, the California Coastal Commission, the California Department of Fish and Game, the California Air Resources Board, the Los Angeles Regional Water Quality Control Board, the California Department of Transportation, the City of Oxnard and/or Ventura County (for the onshore part of the Project within the coastal zone), and local air quality control districts such as the Ventura County Air Pollution Control District and the South Coast Air Quality Management District. Section 1.4.2 contains information on the changes to the proposed Project that have been made during the environmental review process.

Section 1.5 contains information on opportunities for public comment. After the MARAD final license hearing, the public will have 45 days to comment on the Final EIS/EIR and the license application. The Federal and State agencies will have an additional 45 days to provide comments to the MARAD Administrator. The Administrator must issue the Record of Decision within 90 days after the final license hearing. The CSLC will hold a hearing to certify the EIR and make the decision whether to grant a lease. The California Coastal Commission will also hold a hearing. Comments received will be evaluated before any final decision is made regarding the proposed Project.

California Senate Bill 426 (Simitian), which would have created a ranking process for different LNG projects, was re-referred to the California Assembly Committee on Utilities and Commerce on August 24, 2006. As of November 30, 2006, the Legislature's Current Bill Status shows it as "From Assembly without further action," which ended the consideration of the bill during the 2005-06 Legislative Session.

F203-8
Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

LOIS CAPPS
23RD DISTRICT, CALIFORNIA

1707 LONGWORTH HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-0522
(202) 225-3601

COMMITTEE ON
ENERGY AND COMMERCE

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Congress of the United States
House of Representatives

D
1411 MAI
SAN LU
(8

1216 STATE STREET, SUITE 403
SANTA BARBARA, CA 93101
(805) 730-1710

141 SOUTH A STREET, SUITE 204
OXNARD, CA 93030
(805) 385-3440

F204

May 12, 2006

Mr. Dwight Sanders
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

RE: Revised Draft Environmental Impact Report for the Cabrillo Port Liquefied Natural Gas Project

Dear Mr. Sanders:

I am writing to express my general comments on the revised draft environmental impact report (DEIR) for the proposed Cabrillo Port Liquefied Natural Gas (LNG) project. I represent the 23rd Congressional District, in which the proposed onshore facilities and pipelines would be located.

Although the revised DEIR addresses some of the concerns raised by my constituents and others, such as acknowledging that there will be significant air quality impacts and safety risks resulting from this project, it ignores several important matters. Therefore, I remain deeply concerned with the proposed Cabrillo Port project. F204-1

In my view, Cabrillo Port represents an unacceptable threat to public safety, the environment, and future economic development on the Central Coast. As you know, the applicant's license contains no expiration date. The proposed project would require a substantial long-term commitment of capital and dependence on fossil fuel imports. Yet, the project description provides conflicting information regarding the project's size and capacity. According to the revised DEIR, Cabrillo Port will have a maximum capacity of 1.5 billion cubic feet per day of natural gas production. But the EIR analyzes impacts based on an "average" capacity of half that size. This inconsistency would result in an underestimation of the project's impacts and could exacerbate existing problems, such as air quality emissions. F204-2 F204-3

The revised DEIR fails to fully analyze the emissions resulting from this project. For example, it fails to account for the emissions that will inevitably flow onshore and impact coastal communities, some of which already violate state and federal Clean Air Act standards. The revised draft also relies on a Bush Administration decision exempting the applicant from Clean Air Act requirements to offset its emissions. F204-4 F204-5

I am also disappointed the revised DEIR does not adequately explore alternatives to this project. This failing should be addressed immediately. For instance, the DEIR does not include an analysis of energy alternatives that are currently available. There are faster, cheaper and longer- F204-6

F204-1
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. The following Project changes would reduce emissions of nitrogen oxide and other air pollutants:
- Reduction in the number of LNG carriers and change in crew vessel trips;
- Use of natural gas to power LNG carriers in California Coastal Waters;
- Diesel-fueled support vessels with emission controls; and
- Use of specific engine standards for onshore construction equipment.
The Applicant has committed to implement the following additional measure to reduce air emissions:
- Repowering of existing non-Project vessels with cleaner-burning engines.
These changes required revisions to air pollutant emission estimates and related air quality analyses. Section 4.6.1.3 contains revised information on Project emissions and proposed control measures. Section 4.6.4 discusses the health effects attributed to air pollutants and includes revised impacts and mitigation measures.

Sections 4.2.4, 4.2.7.3 and 4.2.8.2 identify agencies with the authority and responsibility for safety standards, design reviews, and compliance inspections. Section 2.1 and Appendix C3-2 identify applicable safety standards.

The lead agencies directed preparation of the Independent Risk Assessment (IRA), and the U.S. Department of Energy's Sandia National Laboratories independently reviewed it, as discussed in Section 4.2 and Appendix C. Section 4.2.7.6 and the IRA (Appendix C1) discuss the models and assumptions used and the verification process. Sandia National Laboratories (Appendix C2) concluded that the models used were appropriate and produced valid results.

The IRA evaluates the consequences of a potential vapor cloud (flash) fire, as discussed in Section 4.2.7.6 and the IRA (Appendix C1). The IRA determined that the consequences of the worst credible accident involving a vapor cloud fire would be more than 5.7 NM from shore at the closest point, as summarized in Table 4.2-1. Figure 2.1-2, Consequence Distances Surrounding the FSRU Location for Worst Credible Events, depicts the maximum distance from the FSRU in any direction that could be affected in the event of an accident. The shape and direction of the affected area within the circle depicted in Figure 2.1-2 would depend on wind conditions and would be more like a cone than a circle, but

would not reach the shoreline.

F204-2
As stated in Sections 1.0 and 2.8, the Applicant's projected FSRU in-service life is a maximum of 40 years, after which the FSRU would be decommissioned and removed from the mooring point and towed to a shipyard.

Section 1.1.1 contains information on the terms and conditions of the Federal license, which has no expiration date and would remain valid as long as the operator remains in compliance with the license. MARAD retains the authority to revoke or suspend the license at any time if any of the conditions of license is no longer satisfied.

If the Project is licensed, it would be subject to monitoring over its life span. For example, the USEPA will require regular reports as part of its NPDES permit; non-compliance with permit requirements will result in fines/penalties and/or require a new/revised NPDES permit, which will be open for public comment. The USEPA can also make the determination and direct that supplemental NEPA documentation is required.

Depending on the type(s) of air permits and the agency that issues them, regular reporting also will be required. Again, non-compliance with permit(s) requirements will result in fines/penalties and/or require new/revised air permit(s). Since the USEPA would issue the construction and operations permit, then any new or revised permit would be open for public comment. The USEPA can also make the determination and direct that supplemental NEPA documentation is required. The USFWS and NOAA will be part of developing monitoring/mitgation programs for terrestrial biota, fisheries, and marine mammals. The USFWS and NOAA can request USEPA to require supplemental NEPA documentation.

Section 1.2 discusses dependence on foreign energy sources.

F204-3
Section 1.0, "Introduction," has been updated to more clearly specify the throughput figures used in the environmental analysis. As stated, "Under normal operating conditions, the annual average throughput would be 800 million cubic feet per day; however, the Applicant has calculated that maximum operating scenarios would allow deliveries of up to 1.2 billion cubic feet per day, or the gas equivalent 1.5 billion cubic feet per day on an hourly basis for a maximum of six hours. These operating conditions would only be in effect if SoCalGas were to offer the Applicant the opportunity to

provide additional gas in cases of supply interruption elsewhere in the SoCalGas system or extremely high power demand, for example, during hot summer days." In addition, applicable sections of the document have been updated similarly to clarify the throughput figures used in the analysis, including Sections 4.6, 4.7, 4.14, and 4.18.

F204-4
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. Section 4.1.8 contains a detailed description of the marine climatic setting. Section 4.6.1.2 has been revised to provide an expanded discussion of the potential transport of offshore air pollutant emissions to onshore areas due to meteorological conditions. Section 4.6.4 contains revised analyses of the impacts on air quality from the emissions of criteria pollutants, ozone precursors, and toxic air pollutants from the FSRU and Project vessels.

The air dispersion modeling analysis of the criteria air pollutant emissions from FSRU and Project vessel operational activities includes prediction of impacts at receptors located from the coastline to 2 miles inland spanning approximately 44 miles from Ventura to Malibu. Additional receptors were also placed along the coastline spanning approximately 38 miles from Malibu to the Palos Verdes Peninsula located directly south of Los Angeles.

F204-5
Ventura County Air Pollution Control District (VCAPCD) Rule 26.2 and South Coast Air Quality Management District (SCAQMD) New Source Review Regulation XIII are applicable only to stationary source emissions. Further, the USEPA has made a preliminary determination that the emission offsets requirements outlined in VCAPCD Rule 26.2 are not applicable to Cabrillo Port equipment and operations.

F204-6
As indicated in Section 4.10.1.3, California Energy Action Plan, "To offset some of the demand for natural gas, California is increasing its energy conservation programs, will retire less efficient power plants, and is diversifying its fuel mix by accelerating the Renewables Portfolio Standard. However, according to the State's 2005 Energy Action Plan, California must also promote infrastructure enhancements, such as additional pipeline and storage capacity, and diversify supply sources to include liquefied natural gas (LNG)." Contrary to the comment, the CEC has studied whether California needs to import LNG to meet its energy needs

and concludes, as indicated above, that it does.

As also discussed in Section 4.10.1.3, the CPUC recently reaffirmed that both the State's Integrated Energy Policy Report and Energy Action Plan recognize the need for additional natural gas supplies from LNG terminals on the West Coast: "However, even with strong demand reduction efforts and our goal of 20% renewables for electric generation by 2010, demand for natural gas in California is expected to roughly remain the same, rather than decrease, over the next 10 years. This is because, a substantial portion of the other 80% of electric generation (not met by renewable energy sources) will need natural gas as its fuel source, and natural gas will still be needed for the growing number of residential and business customers of the natural gas utilities."

term energy solutions, such as conservation, efficiency and renewable energy that are available now. These alternatives will not endanger public safety or our economically valuable coastal environment.

Perhaps most importantly, the revised DEIR fails to describe the most likely "worst-case scenarios" for the tanks, terminals and tanker ships, onshore infrastructure, and nearby coastal communities. This is a serious omission and should be rectified. While the risk zone of the project in the revised DEIR notes that a "vapor cloud" flash fire from a release from two of the three tanks could result in a fire extending 7.3 miles from the terminal, it does not consider the impact a release involving all three storage tanks would cause. Experts believe the fire zone predicted in the DEIR would extend well beyond the 7.3 miles for a three-tank release.

Cabrillo Port would also be located near major shipping lanes, and could impact commercial, recreational and naval navigation. An accident at the terminal or on a tanker, for example, could engulf shipping lanes and threaten humans, marine wildlife or vessels caught in the range of an explosion. Moreover, according to the U.S. Geological Survey, Cabrillo Port and the proposed subsea and onshore pipelines would overlay a number of seismic fault lines prone to major earthquakes. Some of the proposed onshore gas pipelines would also run near several Oxnard-area public schools.

Cabrillo Port raises significant environmental justice issues as well. Unfortunately, environmental justice issues are inadequately identified in the revised DEIR. Cabrillo Port would disproportionately impact low income and culturally diverse communities. A valid assessment of environmental justice issues posed by this project, as well as mitigation for these issues must be part of the final proposal, should it move forward.

This project would also seriously impact the Central Coast's marine environment. The proposed LNG terminal would be sited in the Santa Barbara Channel, adjacent to the Channel Islands National Park and Channel Islands National Marine Sanctuary. Discharges from Cabrillo Port would damage these fragile marine ecosystems. For example, Cabrillo Port would intake 6.3 million gallons per day of seawater to cool its generators. The resulting seawater discharges will be 30 degrees hotter than the ambient ocean temperature. Not only will this degrade ocean water quality, it will kill zooplankton and small fish critical to the survival of marine mammals and local fisheries.

Additionally, there is an increased chance marine mammals like blue and humpback whales, and federally protected gray whales, which migrate through the Santa Barbara Channel and the proposed project site, would suffer injury or death from increased ship traffic. And, because Cabrillo Port is expected to receive shipments three times per week at its new terminal, the likelihood of hazardous diesel, oil or sewage spills are amplified. These spills would have a serious impact on California's important commercial and recreational fishing, boating and tourism industries. For example, the tourism industry, which is heavily dependent on clean ocean water and beaches, supports nearly 700,000 jobs and indirectly generates $75 billion in wages and services each year.

F204-6 Continued

F204-7

F204-8

F204-9

F204-10

F204-11

F204-12

F204-13

F204-14

F204-6 Continued

F204-7
NEPA does not require "worst-case analysis" but does require the agency to prepare a summary of existing relevant and credible scientific evidence and an evaluation of adverse impacts based on generally accepted scientific approaches or research methods. However, the Independent Risk Assessment (IRA) (Appendix C1) defines and evaluates representative worst credible cases (scenarios of events that would lead to the most serious potential impacts on public safety). These included accidents that would affect one, two, or all three tanks of the FSRU.

As shown in Tables 4.2-1, 4.2-2, 4.2-7, and 4.2-8, the release of the contents of all three tanks (the entire contents of the FSRU and an attending LNG carrier) is addressed in the escalation scenario associated with a large intentional event. Section 4.2.7.6 contains additional information on how intentional events are addressed. Although the 2006 U.S. Department of Energy's Sandia National Laboratories third-party technical review of the 2004 IRA found that the three-tank simultaneous release (a massive LNG release in a short time period) was not credible, Sandia recommended the consideration of a cascading (escalation) three-tank scenario.

F204-8
Section 4.16.4 contains information on commercial shipping. Section 4.15.4 contains information on impacts on recreational boating. As stated in Section 4.2.3, "[t]he LNG carriers would use routes that are farther from shore than the FSRU and therefore farther away than the FSRU from most recreational boating and fishing areas and the vessel traffic lanes. As such, LNG carriers would not present risks or hazards to the general onshore public while in transit to the FSRU." The FSRU would be located 3.5 NM (3.54 miles) from the eastern boundary of the Point Mugu Sea Range (Pacific Missile Range). Impacts MT-5 and MT-6 in Section 4.3.4 address potential Project impacts on Naval and Point Mugu Sea Range operations. Section 4.7.4 contains information on potential impacts on marine biological resources and mitigation measures to address such impacts.

Table 4.3-1 contains information on the number and representative sizes of vessels transiting the Project area. The IRA contains an independent evaluation of potential collisions of vessels with the FSRU. The collision analysis conducted for the IRA included those ships capable of damaging the FSRU. Section 3.3.3 of the IRA contains information on the number and types of vessels known to

be or anticipated to be in the Project area and the estimated frequency of ship collisions. Table 4.3-5 summarizes the risks of a ship colliding with the FSRU, as identified by the Applicant.

Section 4.3.1.4 contains information on the safety measures that would be implemented to avoid collisions. As stated, "[a]ll Project vessels would be required to follow the International Maritime Organization's (IMO's) Convention on the International Regulations for the Prevention of Vessel Collisions at Sea. These rules govern the actions of all vessels in international waters and determine the actions a vessel must take to take to avoid a collision and for crossing traffic separation lanes." Section 4.3.2 contains information on other international treaties and standards; national laws/regulations; and local, port, or area-specific rules in place to prevent vessel collisions, groundings, and other accidents; allow for safe operations at port facilities; provide for the security of the United States; protect the environment; promote safety; and allow enforcement of other applicable laws. Impacts MT-1, MT-2, and MT-3 in Section 4.3.4 contain information on impacts, including potential vessel collisions, from an increase in maritime traffic and congestion due to Project construction and operation and the presence of the FSRU and LNG carriers, and mitigation measures to address such impacts.

The IRA evaluates the consequences of a potential vapor cloud (flash) fire, as discussed in Section 4.2.7.6 and the IRA. Section 4.2.7.2 and the IRA contain information on other LNG risk-related scenarios that were evaluated, including vapor cloud explosions and pool fires. Table 4.2-1 shows the maximum consequence distances from the FSRU that would result from an accident at the FSRU. As shown in Table 2.1-2, the distance from the proposed location of the FSRU to the closest point of the shipping lanes is 2.06 NM (2.4 miles). As stated in Section 4.2.7.2, a vapor cloud explosion "would be confined to a local area." As stated in Section 4.3 of the IRA, "[p]ool fire hazards are not predicted to reach the coastwise shipping lane..." The IRA determined that the consequences of the worst credible accident involving a vapor cloud fire would encompass the shipping lane. Figure 2.1-2, Consequence Distances Surrounding the FSRU Location for Worst Credible Events, depicts the maximum distance from the FSRU in any direction that could be affected in the event of an accident. The shape and direction of the affected area within the circle depicted in Figure 2.1-2 would depend on wind conditions and would be more like a cone than a circle. A methane fire would not be behave as a single large fireball traveling with force, but instead an assemblage of many small fires whose ignition and duration would vary. As stated in Section 4.3 of the IRA, the "exposure time within the

shipping lane occurs about 30 minutes after the initiating event, which could allow for notification and response. The exposure time within the shipping lane is for about another 30 minutes, until the vapor cloud dispersion falls below the lower flammability limit."

Impact MT-4 in Section 4.3.4 contains information on potential impacts of this type of incident on marine traffic and the measures that would take place if an incident occurred. AM PS-2a, AM MT-3a, AM MT-3b, and AM MT-3c are measures the Applicant has incorporated into the proposed Project that address this impact. MM PS-3b and MM MT-3f are mitigation measures that address this potential impact. If an incident were to occur, the Applicant would initiate emergency shutdown procedures and use all of their available communication devices on the FSRU and other Project vessels to immediately notify vessels in the area, including hailing and Securite broadcasts. Ideally, such warnings would allow vessels in the area to undertake evasive maneuvers to avoid or minimize potential harm. As stated in Section 4.3.4, "[i]f an accident were to occur, there would be unmitigable impacts on public safety (Class I); however, the impact on marine traffic would be reduced to a level that is below the marine traffic significance criteria (Class II)."

F204-9
The United States Geological Survey (USGS) prepared the report *Comments on Potential Geologic and Seismic Hazards Affecting Coastal Ventura County, California* (Open-File Report 2004-1286, 2004), which is included as Appendix J1. The USGS report was prepared in response to a letter from you to the USGS dated June 25, 2004, which specifically requested advice on geologic hazards that should be considered in the review of proposed LNG facilities offshore Ventura County, California, including the Cabrillo Port LNG Deepwater Port Project. The USGS report examines the regional seismic and geologic hazards that could affect proposed LNG facilities in coastal Ventura County, California. Information from the USGS report is incorporated in Section 4.11, which contains information on seismic and geologic hazards, and conclusions from the USGS report were used in the analysis. Appendices J2 through J4 contain additional evaluations of seismic hazards.

F204-10
Section 4.13.1 contains information on sensitive land uses in proximity to proposed and alternative pipeline routes, such as schools. There are no schools in the immediate vicinity of either of the proposed pipeline routes. Section 4.2.8 describes regulations regarding pipelines, including the requirement to establish public education programs to prevent and respond to pipeline

emergencies. Section 4.2.8.4 contains information on the estimated risk of Project pipeline incidents. Section 4.16.1.2 describes emergency planning and response capabilities in the Project area.

The proposed pipelines within Oxnard city limits would meet standards that are more stringent than those of existing pipelines because they would meet the minimum design criteria for a U.S. Department of Transportation (USDOT) Class 3 location. Also, MM PS-4c includes the installation of additional mainline valves equipped with either remote valve controls or automatic line break controls. SoCalGas operates high-pressure natural gas pipelines throughout Southern California.

F204-11
Section 4.19 describes the methodology used to evaluate the Project's potential environmental justice impacts. The methodology used incorporates guidelines from the USEPA's *Toolkit for Assessing Allegations of Environmental Injustice*. Section 4.19.1.1 identifies a potential for the Project to have disproportionate adverse impacts on minority communities. Section 4.19.4, describes mitigation measures to minimize impacts on minority communities.

The proposed pipelines would meet standards that are more stringent than those of existing pipelines because they would meet the minimum design criteria for a USDOT Class 3 location. Also, MM PS-4c includes the installation of additional mainline valves equipped with either remote valve controls or automatic line break controls.

F204-12
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. The previously proposed FSRU generator engine cooling system used seawater as the source of cooling water for the four generator engines. The Applicant now proposes using a closed tempered loop cooling system that circulates water from two of the eight submerged combustion vaporizers (SCVs) through the engine room and back to the SCVs, which reduces the seawater intake volume by about 60 percent. The seawater cooling system would remain in place to serve as a backup system during maintenance of the SCVs or when the inert gas generator is operating. Section 2.2.2.4 contains a description of the proposed uptakes and water uses for the FSRU.

Section 4.7.4 contains information on uptake volumes and potential impacts of seawater uptake and discharge on marine biota,

including ichthyoplankton from intake of seawater and, from thermal discharges of cooling water. The ichthyoplankton impact analysis (Appendix H1) includes both literature results and data from California Cooperative Oceanic Fisheries Investigations (CalCOFI) surveys. CalCOFI surveys have been consistently collected over a period of time and are the best scientific data currently available.

F204-13
Section 4.7.4 contains information on impacts on marine biological resources and measures to address potential impacts. "Mysticetes" in Section 4.7.1.5 contains information on gray whale migration routes. BioMar-5, BioMar-8, BioMar-9, and BioMar-10 in Section 4.7.4 contain information on impacts on whales and other marine mammals.

AM PS-1a AM PS-1b, AM PS-1c, AM PS-1d, AM MT-3a, AM BioMar-9a, and AM BioMar-9b are measures the Applicant has incorporated into the proposed Project. MM PS-1e, MM PS-1f, MM PS-1g, MM BioMar-5a, MM BioMar-5b, MM BioMar-5c, MM BioMar-10a, MM BioMar-10b, MM MT-3f, and MM NOI-1a are mitigation measures that address these potential impacts.

F204-14
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. Section 4.3.1.3 contains revised information on the number of LNG carriers that would be expected to call on the FSRU per week. Section 2.1 contains information on the regulations that the LNG carriers must meet under Vessel Standards Certificates of Class including the International Convention for the Prevention of Pollution from Ships. "Wastewater Treatment and Discharge" in Section 2.2.2.6 contains information on the amount of gray water that would be discharged. Gray water would be discharged from the FSRU in accordance with a facility-specific NPDES permit issued by the USEPA. Section 4.18.2 contains information on the regulations with which the Applicant would comply to treat, discharge, and/or dispose of wastes and wastewaters. Section 4.18.4 contains additional information on this topic.

Impact HAZ-1 in Section 4.12.4 and Impact WAT-1 and WAT-5a in Section 4.18.4 contain information on offshore Project impacts due to discharges of oil, petroleum, hazardous materials, or sewage. Impacts SOCIO-1, SOCIO-2, and SOCIO-3 in Section 4.16.4 contain information on Project impacts on commercial fisheries. Section 4.15.1.1 contains information on offshore tourism, and Impacts REC-1, REC-2, and REC-3 in Section 4.15.4 contain information on impacts on offshore recreation.

Finally, further consideration of the Cabrillo Port project should await the development of a regional plan for LNG facilities. Since the development of the DEIR, public awareness of the LNG issue in California has increased. In addition, new LNG projects have been announced and are in the process of being permitted. The process of considering projects on a "first-come, first-served" basis is a flawed approach to siting these facilities. The best approach would be to consider the need of the region first and then the best siting alternatives to meet that need. Without a regional analysis, there is a danger of constructing too many LNG facilities and putting them in the wrong locations. The significance of these factors warrants the completion of a regional analysis before this project proceeds. F204-15

Again, thank you for your consideration of these comments. I encourage you to act deliberatively in this matter, based on a thorough public record in light of our nation's goals of public safety, environmental protection and energy diversity. F204-16

Sincerely,

Lois Capps

LOIS CAPPS
Member of Congress

F204-15

Section 1.1.1 contains information on the process used by the Deepwater Port Act (DWPA) of 1974, as amended, which establishes a licensing system for ownership, construction and operation of deepwater port (DWP) facilities. As discussed, the role of the Maritime Administration (MARAD) is to balance the Congressionally imposed mandates (33 U.S.C. 1501) of the DWPA, including those to protect the environment; the interests of the United States and those of adjacent coastal states in the location, construction, and operation of deepwater ports; and the interests of adjacent coastal states concerning the right to regulate growth, determine land use, and otherwise protect the environment in accordance with law.

At the same time, the California State Lands Commission (CSLC) is reviewing the application to ultimately decide whether to grant the Applicant a lease to cross State sovereign lands. As described in Section 1.2.1, "[t]he CSLC authorizes leasing of State lands to qualified applicants based on what it deems to be in the best interest of the State in compliance with the [California Environmental Quality Act]."

Section 1.1.2 contains information on the Governor of California's role in DWP licensing. As discussed, MARAD may not issue a license without the approval of the Governor of the adjacent coastal state (33 U.S.C. 1503(c)(8)). Section 1.1.3 contains information on the role of the U.S. Environmental Protection Agency (USEPA): "[t]he Port must meet all Federal and State requirements and is required to obtain air and water discharge permits from the USEPA." Section 1.2.1 contains additional information on Federal and State responsibilities. Section 1.1.4 contains information on the role of the CSLC to consider whether or not to grant a lease of State lands for the subsea pipelines. The lease may also include conditions relating to those parts of the Project not located on the lease premises. As described in Section 1.3.1, one of the main purposes of the EIS/EIR for MARAD is to "(f)acilitate a determination of whether the Applicant has demonstrated that the DWP would be located, constructed, and operated in a manner that represents the best available technology necessary to prevent or minimize any adverse impacts on the marine environment."

The USEPA, the U.S. Department of Commerce, including NOAA's National Marine Fisheries Service (NMFS or NOAA Fisheries Service), and the U.S. Department of the Interior, including the Minerals Management Service and the U.S. Fish and Wildlife Service, are cooperating Federal agencies.

As discussed in Section 1.3.2, for significant impacts, the CSLC must adopt a Statement of Overriding Considerations to approve the Project if the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects (State CEQA Guidelines section 15093(a)). After the CSLC's decision, other State and local agencies may take actions on the Project, i.e., on related permits or necessary approvals. These agencies include the California Public Utilities Commission, the California Coastal Commission, the California Department of Fish and Game, the California Air Resources Board, the Los Angeles Regional Water Quality Control Board, the California Department of Transportation, the City of Oxnard and/or Ventura County (for the onshore part of the Project within the coastal zone), and local air quality control districts such as the Ventura County Air Pollution Control District and the South Coast Air Quality Management District. Section 1.4.2 contains information on the changes to the proposed Project that have been made during the environmental review process.

Section 1.5 contains information on opportunities for public comment. After the MARAD final license hearing, the public will have 45 days to comment on the Final EIS/EIR and the license application. The Federal and State agencies will have an additional 45 days to provide comments to the MARAD Administrator. The Administrator must issue the Record of Decision within 90 days after the final license hearing. The CSLC will hold a hearing to certify the EIR and make the decision whether to grant a lease. The California Coastal Commission will also hold a hearing. Comments received will be evaluated before any final decision is made regarding the proposed Project.

California Senate Bill 426 (Simitian), which would have created a ranking process for different LNG projects, was re-referred to the California Assembly Committee on Utilities and Commerce on August 24, 2006. As of November 30, 2006, the Legislature's Current Bill Status shows it as "From Assembly without further action," which ended the consideration of the bill during the 2005-06 Legislative Session.

F204-16
Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

Oxnard 19 April 2006

- Land mass similar to the United States, but 20m population.
- 8th largest Foreign Investor in US.
- 14 years of sustained economic growth and the fastest growing economy in the developed world for the past 5 years.
- Resource sector has been fundamental to the economic development.
- We have built a reputation as a reliable supplier of resources with an impeccable safety record.
- Australian LNG has been exported to Asia since 1989 and over 1600 shipments have been delivered without incident.
- Labour and environmental laws applicable in Australia are consistent with US laws and developments receive rigorous scrutiny.
- Our reliability, safety and pricing structure have resulted in Australia reaching LNG supply agreements with Japan, Korea and China.
- BHP Billiton is Australia's largest company and the world's largest resource company, the company is an excellent corporate citizen, acknowledged by business and labour.
- Australia has vast natural gas resources, nearly 200 tcf, production will double in the 5 years to meet Asia Pacific demand for LNG.
- Australia has available resources and a natural connection with US.

F202-1

F202-2

F202-1
Paul Kay, representing the Embassy of Australia in Washington, D.C., submitted this information to the California State Lands Commission as a supplement to his oral testimony provided at the Public Hearing afternoon session on April 19, 2006, in Oxnard, California.

F202-2
Thank you for the information.

- We appreciate California's commitment to a renewable energy future, we propose being part of bridging the gap as you reach that point in 25 to 50 years, because realistically that is how long it will take.
- Australia is a stable, secure and safe supplier of natural gas that California can count on to supply energy when the project proceeds.
- We hope that the project can come to a conclusion with your support in its 3rd year of review.
- California seeks the economic and environmental benefits of natural gas. A logical supplier is the world's largest resource company, where CEO is American, and that source being a long term ally and Western developed country?
- The US has a balance of trade surplus with Australia of the order between $6-9b per annum. Now there are not many countries you currently have a surplus with and if price is competitive, why wouldn't you do business with an ally?
- The advent of the FTA last year means manufactured goods from the US generally enter Australia duty free, hopefully the commercial, cultural, political ties between our two nations will grow substantially.

- Question, is Australia prepared? Australia wants to supply natural gas on a responsible market basis, while we can do this in Asia we would also like to improve our international relationship with the US.

F202-2 Continued

F202-2 Continued

United States Department of the Interior
OFFICE OF THE SECRETARY
Washington, DC 20240

F201

TAKE PRIDE IN AMERICA

APR 2 8 2006

In Reply Refer To:
ER 06/273

California State Lands Commission
Attn: Dwight E. Sanders
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Dear Mr. Sanders:

The U.S. Department of the Interior (DOI) has reviewed the LNG Deepwater Port Revised Draft Environmental Impact Report (Revised DEIR) for the Cabrillo Port LNG Deepwater Port. The U.S. DOI Minerals Management Service (MMS) reviewed sections of the document according to their areas of expertise, primarily regarding issues related to MMS issuance of a right-of-way (ROW) permit under 30 CFR 250.1009 for the LNG pipelines associated with Cabrillo Port and commensurate environmental analyses to support the ROW permit. A general review was conducted as well in accordance with reviews of the previous DEIR. While some previous comments seem to be rectified in the Revised DEIR, issues relating to pre-lay geological and geotechnical surveys and environmental impacts associated with those operations appear to be lacking in this Revised DEIR. The MMS will continue to work with the United States Coast Guard to rectify these issues in the Final EIS/EIR (FEIS/R). The comments that follow identify specific areas that we think could be corrected, further clarified, or where supplementary detail is needed.

Volume I, Section 1.6, pages 1-34 to 1-35: This section should state that under agreements with the USCG, the MMS would issue a pipeline right-of-way (ROW) for the portion of the natural gas pipeline in federal waters associated with Cabrillo Port under 30 CFR 250.1009. The ROW would be issued after the Deepwater Port Application has been approved; additional geohazard, cultural and biological surveys, and supplemental environmental and engineering analyses may be required prior to issuing the ROW. F201-1

Volume I, Section 2.6.2.1, page 2-67, Pre-Lay Survey: We believe that impacts of the pre-lay surveys to be conducted in support of pipeline and mooring construction and ROW issuance should be addressed and analyzed in the FEIR to ensure potential impacts from those activities are identified and mitigated. F201-2

Volume I, Section 3.4.2, page 3-43: Please provide more information regarding the proposed Santa Barbara Channel Project Alternative pipeline route through Platform Gilda. It is unclear as to whether the alternative pipeline as proposed would use the existing Platform Gilda pipeline and ROW or is a separate route to shore. In addition, please explain what modifications are envisioned at Platform Gilda. F201-3

F201-1
As discussed in Section 2.3.1, if a license were issued, it would be conditioned to require that construction and installation of pipelines meet the MMS standards per existing or developed agreements between the MMS and the USDOT PHMSA prior to commencement of construction activities. This includes any additional environmental analysis that may be deemed necessary.

F201-2
After discussion between the USCG and MMS representatives in Washington, D.C. and California, it was determined that collection of deep penetration data will not be required for the mooring locations and the pipeline route.

F201-3
Section 3.4.2 has been updated to clarify this issue. Platform Gilda would not be used in any way for this alternative; it was included only as a geographic reference point.

Volume I, Section 4.7.1.4, page 4.7-13: The discussion of Hubbs-Sea World Research Institute (HSWRI) Grace Mariculture Project is dated. The agreement between Hubbs Sea World Research Institute and Venoco was that HSWRI would lease part of the standing platform and use of the surrounding waters and seafloor within the 500 m safety zone of Platform Grace. The lease agreement expired on March 31, 2004. HSWRI has not been able to get an extension on the expired lease or to reach an agreement on another lease for Platform Grace. Although HSWRI contacted several companies concerning a similar lease agreement for a platform off Long Beach, all companies have stated that they have no interest in a mariculture project. F201-4

Volume I, Section 4.7.4, Impact BioMar-3, page 4.7-41: Please provide information and analyses on the potential impacts to fish behavior from noise associated with the pre-lay surveys on proposed pipelines and moorings. F201-5

Volume I, Section 4.7.4, Impact BioMar-5, page 4.7-54: Please provide information and analyses on the potential impacts to marine mammal behavior from noise associated with the pre-lay surveys on proposed pipelines and moorings. Additionally, mitigation measures should be included with a discussion of the resulting impacts to marine mammals from implementation of those measures during pre-lay survey operations.

Volume I, Section 4.11.1.3, page 4.11-24, last paragraph: "Offshore there is no evidence of recent fault rupture along the pipeline routes..." The authors need to caveat this statement that based on available information, there is no evidence of recent fault rupture; however, a subsequent geohazards survey for the pipeline ROW may be conducted and may reveal fault rupture along the pipeline route that is not seen on the current seismic data. F201-6

Volume I, Section 4.11.1.4, page 4.11-24, 3rd paragraph: An internal CalTrans report is cited. It is unclear whether this report is available to the public. If it is not available to the public, it should not be used to determine peak ground acceleration. Conversely, if it is indeed available to the public, then the actual report should be listed in the references, not as a second hand reference. F201-7

Volume I, Section 4.11.1.4, page 4.11-24, 4th paragraph: It is not clear as to whether the ground accelerations cited apply to the offshore, or only to the onshore point listed in the references. If the acceleration does apply offshore, provide the data on which it was based. F201-8

Volume I, Section 4.11.1.5, page 4.11-25, last paragraph: The authors need to caveat this statement that based on available information there is no evidence of gas seeps along the pipeline route; however, a subsequent geohazards survey for the pipeline ROW will be conducted and may reveal gas seeps along the pipeline route that are not seen on the current seismic data. F201-9

F201-4
The information regarding the HSWRI Grace Mariculture Project has been deleted.

F201-5
See the response to Comment F201-2.

F201-6
The analysis is based on presently available information; Section 4.11.1.3 contains revised text to clarify this. MM GEO-3c in Section 4.11.4 contains information on final site-specific geotechnical and seismic hazard studies the Applicant would be required to conduct prior to construction.

F201-7
The California Geological Society (CGS) has conducted modeling to estimate peak ground acceleration (Pga), and this information was used to estimate Pga for the Project area. The information contained in the internal CalTrans report compares favorably with CGS data. Because the internal CalTrans report is not readily available to the public, however, reference to it has been removed from Section 4.11.1.4.

F201-8
The text in Section 4.11.1.4 has been revised to clarify the three locations used to estimate peak ground acceleration.

F201-9
See the response to Comment F201-6.

Volume I, Section 4.11.4, page 4.11-37, MM GEO-3c, Geotechnical Studies, 2nd bullet: The additional near-bottom geophysical surveys that are proposed are not adequate to meet MMS guidelines for approval of the pipeline ROW. The document should address this and describe the instrumentation and spacing that will be used when the surveys are conducted. F201-10

Volume I, Section 4.11.4, Impact GEO-5, page 4.11-39, 2nd paragraph: "The proposed Project route does not overlie areas with previously identified slump movement or canyons where turbidity flows are most likely to occur..." The following sentence states that the Applicant has identified three areas where the marine pipeline could be subject to turbidity flows and proposes that the pipeline be hardened in those areas. We feel that the applicant should caveat these statements to reflect that a subsequent geohazards survey for the pipeline ROW will be conducted and may reveal other areas subject to turbidity flows along the pipeline route that are not seen on the current seismic data or previous geohazards mapping. F201-11

Volume II, Section 4.18.4, page 4.18-32: Please provide the spill model utilized to determine the trajectory analyses for a diesel spill from the Floating Storage and Regasification Unit. Additionally, the fate and effects of a diesel spill due to weathering processes should be discussed and may have an effect on the resulting Impact Class if mitigations are applied. F201-12

Please contact Mr. James F Bennett, Chief, Environmental Assessment Branch, MMS at 703-787-1660 if you have questions or need further clarification regarding these comments.

Sincerely,

Willie R. Taylor
Director
Office of Environmental Policy
and Compliance

cc: James F Bennett, MMS
Lynnette Vesco, MMS
James Devine, USGS

F201-10
The USCG resolved this issue with MMS during consultation. MMS has indicated that it already has the geophysical surveys covering the proposed Project, which meet MMS guidelines.

F201-11
As stated in Impact GEO-5 in Section 4.11.4, the Applicant would be required to conduct final site-specific geotechnical and seismic hazard studies prior to construction (MM GEO-3c).

F201-12
Vector analysis in conjunction with the ADIOS oil weathering model was used after it was determined that General NOAA Oil Modeling Environment (GNOME) would not be appropriate due to the lack of site-specific hydrodynamic data.

F200

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND SOUTHWEST
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132-5190

24 April 2006

Mr. Dwight E. Sanders
California State Lands Commission
100 Howe Avenue
Suite 100-South
Sacramento, CA 95825

Dear Mr. Sanders,

This letter and the attached comments provide the Department of the Navy (DON) response to the revised DEIR for the Cabrillo Port Liquefied Natural Gas Deepwater Port (March 2006), State Clearing House No. 2004021107. We appreciate the opportunity to review the document.

DON has several concerns regarding LNG tanker routes and the alternative NBVC pipeline corridor.

First, DON is concerned with the cumulative effect of tanker routes transiting our offshore ranges. This cumulative effect was not addressed in the DEIR (2004). Specifically, since publication of the initial DEIS/EIR, additional LNG proponents have either submitted applications or identified the location of their proposed project that were considered in the DEIR. In response, we have identified and proposed LNG tanker route alternatives through DON's Point Mugu and SOCAL sea ranges for all known LNG projects in the area to include Long Beach Harbor, Crystal Clearwater Deepwater Port, Woodside deepwater proposal as well as Cabrillo Deepwater Port. F200-1

Second, DON is concerned with the level of detail regarding the proposed LNG project. Specifically, inadequate information exists for DON to assess the impact of the metering station and unburned gas/blow down for the NBVC pipeline alternative. Since impacts to DON land have unique impacts due to its training and operational mission, we request additional details be provided for a more thorough analysis of impacts to NBVC. F200-2

My point of contact for this project is Ms. Sheila Donovan who is available to meet with you or answer any questions you may have. She can be reached at (619) 532-1253 and by e-mail, Sheila.Donovan@navy.mil.

Sincerely,

D. P. KING
Captain, Civil Engineer Corps
U.S. Navy
Commanding Officer

F200-1
The Navy and the USCG have now agreed upon LNG tanker routes for the Cabrillo Port Project to minimize impacts on the offshore ranges. The routes for other LNG carriers would have to be negotiated between the Navy and the other Project proponents.

F200-2
Section 2.4.1.2 contains additional information on components of the proposed and alternative metering stations. Section 2.4.1.5 contains new information on operating procedures for planned gas blowdown. Section 4.2.9.4 states that the potential impacts on public safety for the Point Mugu alternate shore crossing would be similar to those associated with those of the proposed Center Road Pipeline.

Navy Comments on
DON Comments on the
Cabrillo Port LNG DEIR (March 2006)

#	Page	Reference	Reviewer	Comment
1.	ES-26	4.3	S. Donovan	Please add discussion of cumulative impact of LNG tanker routes through PT Mugu and SOCAL sea ranges. Request that tanker routes be revised as shown in the attached map.
2.	ES-39	4.17 para 8-9	Danza, NBVC	The alternative that crosses NBVC Point Mugu may impact air operations depending on location of land based facilities.
3.	3-44	3.4.3.1 para 9-17	Danza, NBVC	Description and maps do not adequately describe the location of the metering station. In Chapter 2 "Description of Proposed Project", 8-foot blowdown stacks and a building are mentioned. It is unclear whether these features apply to all alternatives. Of potential concern are the Arnold Road and Mugu Alternatives. Pt. Mugu Visual Flight Rules (VFR) flight track for Runway 27 (departure) / Runway 09 (arrival) traffic pattern ranges from surface thru 1000 ft above ground level and would be situated within a 300 - 400 ft the proposed metering station. If the Runway 27 VFR flight track were extended from the departure runway edge line it would intersect the metering station at the Casper Road Milepost Marker (0) at an estimated distance of 7,000 ft. from the extended centerline. Additionally, the Arnold Road Milepost Marker (0) would be intersected at an estimated distance of 10,000 ft from the same point of origination Details are required to determine potential impacts to Navy mission and air operations. Areas of concern may include: ordnance arcs, flight paths, aircraft accident potential zones, and vertical clearances. Potential emissions are a concern for air operations. Unburned natural gas emissions may release an ignitable cloud, which aircraft may fly through. Also, flaring may cause aircraft engine and turbulence issues for aircraft, depending on size of the flare. Additional information is required.
4.	3-44	3.4.3.2 para 27-33	Danza	Description and maps do not adequately describe the location of the metering station. Location and details are required to determine potential impacts to Navy mission and air operations. Areas of concern may include: ordnance storage, flight paths, aircraft accident potential zones, vertical clearances, and emissions (unburned gas).
5.	3-44	11-13	ENV DIV/Adams	Describe components of metering station. For example, odorization, valves, lowdown stacks.
6.	3-44	18-19	ENV DIV/Adams	Describe the "maintenance activities (that) would occur on a remote portion of ENV DIV Point Mugu."

F200-3

F200-4

F200-5

F200-6

2006/F200

F200-3
See the response to Comment F200-1.

F200-4
The location of the proposed metering station is illustrated on Figure 4.8-4a at Milepost 0.0. The metering stations for the alternative routes would have the same equipment and footprint as the Ormond Beach Metering Station described in Section 2.4.1.2 and depicted on Figure 2.1-1.

F200-5
Section 2.4.1.2 describes the physical layout of all potential metering stations. An 8-foot fence would surround the station, which would include 8-foot blowdown stacks, steel components that would be less than 10 feet tall, and a 20-foot tall communications tower.

The locations of the metering station alternatives are provided on Figure 4.8-4.a. Neither metering station alternative is located on NBVC Point Mugu.

If either the Arnold Road or Point Mugu Alternatives were to be implemented, blowdown events at the metering station would be scheduled in conjunction with the Navy to prevent any disruption of Navy operations.

F200-6
Section 3.4.3.1 has been revised to clarify where construction and maintenance activities could occur on NBVC Point Mugu.

F200-7

F200-8

F200-9

#	Page	Reference	Reviewer	Comment
7.	4.2-90	13-16	ENV DIV/Adams	The Mugu Shore Line crossing alternative effect analysis is supposed to be similar to the analysis for MP 0.0 to approximately MP 2.5 of the proposed Center Road Pipeline. The analysis for the Center Road Alternative MP 0.0 to MP 12.5 is supposed to be the same as the proposed action. The impacts described for the proposed action do not include effects from pipeline blowdown. The metering facility for the Mugu Shoreline crossing is not described. I assume that the metering station for the Mugu Alternative would be the same as for the proposal, however, the EIR must make that statement or describe the facility for the Mugu alternative. Pipeline blowdown is the evacuation of the pipeline contents to the atmosphere. The EIR states this would take about 15 minutes. Depending on atmospheric conditions, a large cloud of flammable gas would form at or above the metering station. The air above the metering station is sometimes transited by our aircraft. The effect of aircraft - gas cloud interaction must be described.
8.	4.3-1	25-29	NAVAIR/Tony Parisi	The description of the Point Mugu Sea Range and warning areas is not completely accurate. It should read, "...which is used for aircraft and weapons system testing, and Fleet training. The closest warning areas to the FSRU are overflown by aircraft and aerial targets but used infrequently for missile impacts." The change should also be made in the Executive Summary.
9.	4.3-2		NAVAIR/Tony Parisi	The description of Vessel Type for *Navy vessels operating on the Point Mugu Sea Range* is incorrect. The vessels that typically operate on the Sea Range are described in the Point Mugu Sea Range Environmental Impact Statement and can range from small target boats to aircraft carriers.

F200-7
Section 4.2 contains revised information on this topic.

F200-8
Section 4.3.1.1 has been revised per the comment.

F200-9
Section 4.3.1.1 has been revised per the comment.

#	Page	Reference	Reviewer	Comment
F200-10 10.	4.3-6 to 4.3-9	26 20	NAVAIR/Tony Parisi	The description of activities on the Point Mugu Sea Range is not accurate as it emphasizes a small subset of activities conducted on the range. Replace all text from line 26 on page 4.3-4 to line 20 on page 4.3-9 with the following: "The Point Mugu Sea Range is used by U.S. and allied military services to test and evaluate sea, land, and air weapons systems; to provide realistic training opportunities; and to maintain operational readiness of these forces by providing a safe, operationally realistic and thoroughly instrumented testing and training environment. The Point Mugu Sea Range supports the following types of testing and training: • Air-to-air testing • Air-to-surface testing • Surface-to-air testing • Surface-to-surface testing • Subsurface-to-surface testing • Fleet training exercises • Small scale amphibious warfare training • Special warfare training • Theater missile defense testing & training Operations on the Sea Range involve aircraft, ships and boats, unmanned aerial and surface targets, missiles and guns. Vessel traffic is cleared from any areas on the Point Mugu Sea Range where there would be a potential hazard." This is the same description that is used in Section 4-20 of this document.
F200-11 11.	4.3-46 and Fig 4.3-2		NAVAIR/Tony Parisi	Please revise text and map to reflect revised tanker route and to include the two routes labeled Crystal/Woodside/Crystal alternatives #1 and #2 on the attached map in this section or in the cumulative analysis.
F200-12 12.	4.3-10/11	28-7	NAVAIR/Tony Parisi	This should be changed to read: "The routing for LNG carriers approaching the FSRU is shown in Figure 4.3-2. Normally, the LNG carrier Master would select the approach and departure from the routes in accordance with Cabrillo Port's Marine Operations Manual…" Add the following at the end of the paragraph, "Although infrequent, Navy operations could preclude use of either or both routes for periods up to several hours. In those cases, the LNG carrier Master will adjust to ensure there is no impact on Navy operations."

F200-10
Section 4.3.1.1 contains the provided information.

F200-11
Section 4.20 contains information on the cumulative impacts of tanker traffic resulting from the Clearwater and Woodside (OceanWay) projects.

F200-12
Section 4.3.1.1 has been revised per the comment.

#	Page	Reference	Reviewer	Comment
F200-13 13.	4.8-20	32	ENV DIV/Ruane	The text is incorrect. Tidewater gobies have not been found in Mugu Lagoon. The citation in text for the presence of Tidewater gobies in Mugu Lagoon is "1998 bioassessment study of Mugu Lagoon". There is no 1998 bioassessment study in the references section so we can't go to the reference and check it. Please change the text to indicate that Tidewater gobies have not been found at Mugu Lagoon. Please provide a citation in references for the data presented.
F200-14 14.	4.8-21	map	ENV DIV/Ruane-Lang	Correct the figure title, legend, and graphic to indicate that species are present at the metering station and around COTAR Pad. The areas associated with the Mugu shoreline crossing (COTAR Pad at NAS Point Mugu and the metering station are occupied habitat not potential habitat. The area around the metering station is habitat for snowy plovers and beldings savannah sparrow and the area around COTAR Pad is habitat for snowy plovers, least tern, and beldings savannah sparrow.
F200-15 15.	4.8-23	map	ENV DIV/Ruane Lang	Correct the figure title and legend to indicate the highlighted areas are occupied by salt marsh birds beak. Also change the legend to show the ENV DIV surveys were conducted in 2005.
F200-16 16.	4.8-74	12-13	Planning/Bentle y	Replace the word "will" with "may". To explain, the Navy must determine that Naval Air Warfare Center-Weapons Division has no further use for COTAR Pad and then seek permission for Navy Region Southwest to remove the pad.
F200-17 17.	4.11-43	32-36	ENV DIV/Adams	The text states that a tsunami could damage the Ormand Beach metering station (see page 4.11-40, line 12). However, There is no effect assessment of a tsunami damage on the metering station. The effects resulting from tsunami damage of the Mugu shoreline crossing metering-station must be described or discuss why damage to the metering station would not have effects.
F200-18 18.			ENV DIV/Griffaw	Recommend a hazardous waste management plan be developed to show exactly how the company will manage its HW.
F200-19 19.	4.13	4.13-11 general	Danza	Land uses are not adequately described or considered in the document for Navy land. NBVC is currently updating its Regional Shore Infrastructure "Master Plan", with completion in September 2006. Current land and future land use information can be forwarded.
F200-20 20.	4.13.5.4	4.13-45 para 18-19	Danza	Note that NBVC is federal property and is therefore outside of the Coastal Management Zone (CMZ). Impacts on federal property are considered by the CCC if they have the potential to impact the CZM. Normally, NBVC determines consistency with the CZM Act, and requests concurrence from the CCC.
F200-21 21.	4.13-45	23-26	ENV DIV/Adams	Assess potential impact of lowdown on NAS Point Mugu aircraft.

2006/F200

F200-13
A statement was added to indicate that according to the Navy, tidewater gobies are not present in Mugu Lagoon, and the requested references have been added.

F200-14
This figure has been updated.

F200-15
This figure has been updated.

F200-16
Section 4.8 has been revised per the comment.

F200-17
Impact GEO-6 contains information on the potential for damage to nearshore Project pipelines or facilities from tsunamis, and it acknowledges the potential for tsunami damage to the Ormond Beach Metering Station. The metering station would be built in comliance with the laws, regulatory requirements, and plans for geologic resources listed in Table 4.11-3, including the Uniform Building Code (UBC) and the California Building Code (CBC). As stated in Section 2.3.2, "[a] main line valve at the SoCalGas facility would separate the offshore facilities from the SoCalGas facilities and would serve as an emergency shutdown valve that would automatically close to isolate flow between the offshore transmission pipelines and the SoCalGas system in an emergency."

F200-18
MM HAZ-2b would require the Applicant to develop and implement a Hazardous Material Contingency Plan.

F200-19
The revised current and future land use information cited by the commenter was not available at the time of publication. The only NBVC land that would be used by the proposed Project would be the Point Mugu Shore Crossing/Casper Road Pipeline Alternative (see Section 4.13.5.4).

F200-20
Thank you for the information.

F200-21
Natural gas pipelines exist near, under, and around large airports all over the world, and many structural and engineering options are available. If this pipeline route were to be selected, conditions

would be put on the license so that its design and installation would ensure that Navy planes remain safe.

	#	Page	Reference	Reviewer	Comment
F200-22	22.	4.13-44	4.13.5.4 37	Explosive Safety Officer, Steve St John	Statement indicates On-base land use can be grouped into ten categories: Aircraft Operations, Aircraft Maintenance, Base Support, Test and Evaluation, Administration, Community Support, Housing, Training, Ordnance, and Open Space. Not mentioned is the ordnance space affected by this project. Magazine 800 Row will require Explosives Safety Site Approval IAW paragraphs 8-1.2.1a (8) & (11) of NAVSEA OP-5, Vol 1, Seventh Revision. Approval must go through DDESB (Department of Defense Explosives Safety Review Board) and this process can take up to 8-months.
F200-23	23.	4.17	4.17-2 para 9	Danza	NBVC has two runways. Aircraft depart from 03, 21, and 27.
F200-24	24.	4.17	4.17-2 para 17	Danza	Map needed to show location of metering station. Site may have significant impact to Navy mission depending on scope of the project and location.
F200-25	25.	4.17	4.17-16 para 1	Danza	Additional evaluation required on potential impact to air traffic operations.
F200-26	26.	4.17	4.17-16	Danza	A risk assessment may be required to evaluate dangers should an aircraft crash on the portion of the pipe that is near the surface. Mitigations may need with regards to location and construction.
F200-27	27.	4.17-34	6-9	ENV DIV/Adams	Assess effects on NAS Point Mugu air traffic from lowdown of pipeline. Assess potential for aircraft from NAS Point Mugu to strike the metering facility for the Mugu shoreline crossing.
F200-28	28.	4.17-34	6-9	ENV DIV/Massey	Pipeline lowdown may disturb waterfowl at nearby duck club. Assess effect of bird disturbance on aircraft from bird aircraft strike.
F200-29	29.	4.18.5.4	4.18-38 para 37-38	Danza	Statement indicates that NBVC would be crossed by trenching. Not mentioned in other parts of the document. Need description/map and design (depth). Once details are provided, NBVC can assist with evaluating potential impacts (ESQD arcs and air ops).
	30.	4.18.5.4	4.18-38 para 37-38	Explosive Safety Officer, Steve St John	Statement indicates that NBVC would be crossed by trenching. Not mentioned in other parts of the document. Need description/map and design (depth). Once details are provided, NBVC can assist with evaluating potential impacts (ESQD arcs and air ops). Magazine 800 Row will require Explosives Safety Site Approval IAW paragraphs 8-1.2.1a(8) & (11) of NAVSEA OP-5, Vol 1, Seventh Revision. Approval must go through DDESB (Department of Defense Explosives Safety Review Board) and this process can take up to 8-months.
F200-30	31.	4.18-38	12-30	ENV DIV/Wilson	Include the following requirement "No wastewater of any kind will be discharged to the storm water drains or sanitary sewer. All wastewater discharges must be contained and disposed of properly. All requests to dispose industrial wastewater to the sanitary sewer must be approved by the Water Program Manager, Tom Web (805) 982-2969." Identify construction site runoff control and post-construction runoff controls per Phase II NPDES Rule.
F200-31	32.	4.20-2		NAVAIR/Tony Parisi	Table 4.20-1 does not include the proposed Woodside LNG terminal/port. It should be included in the table and addressed in the cumulative impacts analysis (see comment No.33).
	33.	4.20.3.3	13-28	S. Donovan	Please revise this section to include cumulative impacts on LNG tanker traffic on offshore DON sea ranges.

2006/F200

F200-22
Section 4.13.5.4 has been updated to clarify that Magazine 800 Row would require Explosives Safety Site Approval.

F200-23
The text has been revised in response to the comment.

F200-24
As the proposed metering station would be entirely within the Reliant Energy Ormond Beach Generating Station, it would have no effect on the Navy's operations or mission.

F200-25
As discussed in Section 2.1.4.2, the tallest structure at the metering station would be the 20-foot communications tower, which would not affect air operations.

F200-26
Section 4.2 contains information on the likelihood of pipeline accidents. Because an aircraft accident on land above the pipeline right-of-way is unlikely and mitigation that would reduce the effects of any pipeline accident has been incorporated (see AM PS-4a and MM PS-4c), no additional mitigation is necessary.

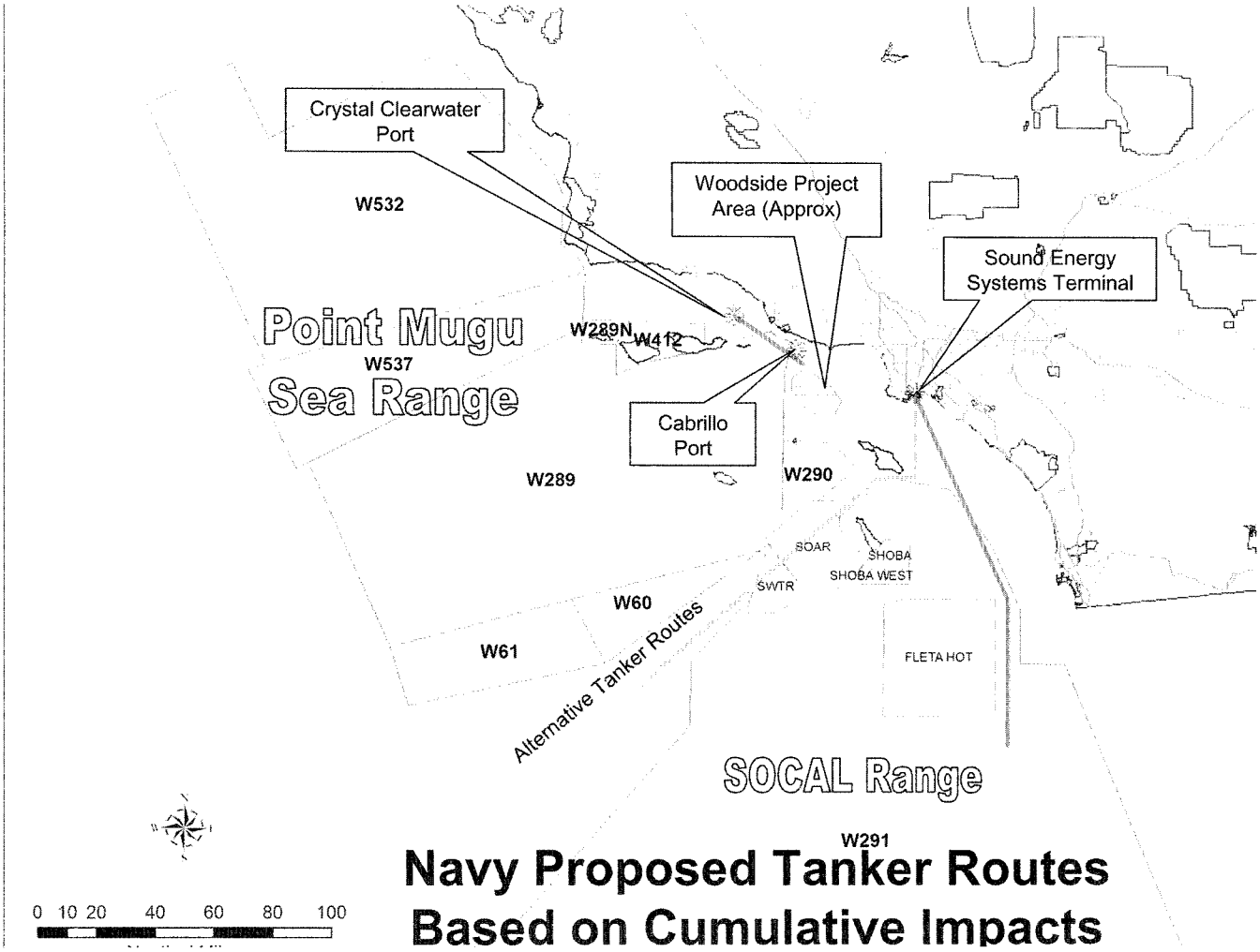
F200-27
See the response to Comment F200-21. Table 4.2-4 contains information on commercial aircraft risk, which indicates an extremely low likelihood of occurrence.

F200-28
Section 4.8.5 was revised to indicate that a blowdown would be considered an infrequent or unlikely event. Thus, potential disturbance of birds at a nearby duck club would be unlikely, and if it occurred, it would be considered a minor and short-term adverse impact on the waterfowl. See the response to Comment F200-21.

F200-29
Section 4.18.5.4 has been revised. The NBVC would not be crossed in the Arnold Road Shore Crossing/Arnold Road Pipeline Alternative.

F200-30
Section 4.18.5.4 has been revised per the comment.

F200-31
Section 4.20 has been updated.



Navy Proposed Tanker Routes Based on Cumulative Impacts

F200-32
After consultations between the USCG and the U.S. Navy, the U.S. Navy agreed that the LNG carrier routes as proposed would be preferable.

F205

EPA REGION 9
http://www.epa.gov/region09

REGION 9 CROSS-MEDIA DIVISION

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX

COMMUNITIES AND ECOSYSTEMS DIVISION
75 HAWTHORNE ST., SAN FRANCISCO, CA 94105
OFFICE: (415)947-8704 FAX: (415) 947-8026

Date: 5/15/06

TO: DWIGHT SANDERS
Fax #: (916)574-1885

FROM: SUMMER ALLEN
Fax #: (415) 947-8026

Subject: CABRILLO DEIR

Number of pages including cover sheet: 10

Comments:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

May 12, 2006

Lt. Ken Kusano
U.S. Coast Guard
2100 Second Street, S.W.
Washington, D.C. 20593-0001

Mr. Dwight Sanders
California State Lands Commission
Division of Environmental Planning and Management
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

Subject: Revised Draft Environmental Impact Report for the Cabrillo Port Liquefied Natural Gas (LNG) Deepwater Port, Ventura and Los Angeles Counties, California (State Clearinghouse # 2004021107)

Dear Lieutenant Kusano and Mr. Sanders:

The U.S. Environmental Protection Agency (EPA) has permitting responsibilities under the Clean Air Act and the Clean Water Act for the proposed Cabrillo Port Liquefied Natural Gas (LNG) Deepwater Port project. We have been working with the U.S. Coast Guard (USCG), California State Lands Commission (SLCS), and other state agencies and county air districts to ensure that this project satisfies all federal, state and local requirements. We previously commented on the Preliminary Draft Environmental Impact Statement/Environmental Impact Report for this project on October 8, 2004 and on the Draft Environmental Impact Statement/Environmental Impact Report (Draft EIS/EIR) on December 21, 2004.

We have reviewed the Revised Draft Environmental Impact Report (RDEIR) and appreciate the additional information that has been provided about this project since the Draft EIS/EIR. We have identified inconsistencies between the RDEIR and the air and water permit applications as well as other concerns regarding impacts to air and water resources and environmental justice communities that USCG and CSLC should address in the Final Environmental Impact Statement/Environmental Impact Report (Final EIS/EIR). Our detailed comments regarding these issues and concerns are enclosed.

We appreciate the opportunity to review this RDEIR and look forward to continuing to work with you to ensure that the project's impacts are avoided or mitigated to the fullest extent possible. When the Final EIS/EIR is released for public review, please send three copies to the address above (mail code: CED-2). If you have any questions, please contact me at 415-972-3988 or Summer Allen, the lead reviewer for this project. Summer can be reached at 415-972-3847 or allen.summer@epa.gov.

Sincerely,

Duane James, Manager
Environmental Review Office

Enclosures:
EPA's Detailed Comments

cc: Michael Ferris, U.S. Maritime Administration
Michael Villagas, Ventura County Air Pollution Control District
Mohsen Nazemi, South Coast Air Quality Management District
Mark Durham, US Army Corps of Engineers
Jonathan Bishop, Los Angeles Regional Water Quality Control Board
Chuck Damm, California Coastal Commission

EPA DETAILED COMMENTS ON THE REVISED DRAFT ENVIRONMENTAL IMPACT REPORT (RDEIR) FOR THE CABRILLO PORT LIQUEFIED NATURAL GAS (LNG) DEEPWATER PORT, MAY 12, 2006

Air Resources

General Conformity

The federal general conformity requirements apply to all federal actions that occur in federal nonattainment or maintenance areas. Because the Cabrillo Deepwater port is located outside of the federal nonattainment area of Ventura County, general conformity does not apply to the port even though emissions from ships or other operations at the port could be transported into the federal nonattainment area. However, general conformity does apply to other federal actions related to the Deepwater port that occur onshore (e.g., Army Corps Section 404 permit) and are within the federal nonattainment/maintenance areas of Ventura and Los Angeles Counties.

In March 2006, the U.S. Coast Guard (USCG) issued a Draft General Conformity Determination addressing all federal actions associated with the Cabrillo port (onshore and offshore). On April 28, 2006, EPA found that the Draft General Conformity Determination did not meet the requirements of 40 CFR Part 93.158(d) and 93.156(d), and therefore, should not be finalized.[1] We agreed with the USCG that construction-related NOx emissions in Los Angeles County do not conform to the South Coast State Implementation Plan (SIP) because documentation regarding NOx emissions offsets has not been provided to the USCG by BHP Billiton (BHP). We recommended that USCG issue a new Draft General Conformity Determination after an affirmative finding of conformity can be made consistent with the 40 CFR Part 93 requirements. We recommended that this new determination include all "supporting materials which describe the analytical methods and conclusions relied upon in making the applicability analysis and draft conformity determination." (See 40 CFR Part 93.1560(a)). We also had additional, specific edits for the Determination.

To demonstrate the on-shore construction activities conform to the South Coast SIP, the applicant intends to use mitigation through emissions offsets as described at the bottom of page 4.6-27. EPA recommends that the following be added to MM AIR-1a in Table 4.6-20 "Summary of Air Quality Impacts and Mitigation Measures":

> "In addition to the Construction Emissions Mitigation Plan, the Applicant proposes to fully offset total annual NOx emissions from the on-shore construction operations in Los Angeles County."

Project-Related Air Emissions

BHP has also recently submitted more detailed information regarding its planned emission reduction program, which is referenced at lines 24-29 on page 4.6-33 of the

[1] Letter available at USCG Docket website at http://www.dms.dot.gov and identified by the document number: USCG -2004-16877-990.

F205-1

F205-2

F205-1
In March 2006, the USCG and MARAD solicited public input on a Draft General Conformity Determination, which concluded that NOx emissions generated from Project construction activities in Los Angeles County were subject to the General Conformity Rule. All other Project-related emissions were determined not to be subject to the General Conformity Rule. Subsequent to the issuance of the Conformity Determination, BHPB provided a written commitment that all onshore pipeline construction equipment would, to the extent possible, utilize engines compliant with USEPA Tier 2, 3, or 4 non-road engine standards with Tier 2 being the minimum standard for any engine.

Project emissions were then reanalyzed to assess the potential emission reductions associated with the stated commitment and to reassess the applicability of the General Conformity Rule. The revised General Conformity analysis concluded that all applicable Project emissions would be less than *de minimis* thresholds in both Ventura and Los Angeles Counties and, therefore, not subject to the General Conformity Rule. Based on this conclusion, the USCG and MARAD will not finalize the Draft General Conformity Determination.

Section 4.6.1.3 and Section 4.6.2 contain revised Project emission estimates and a revised discussion of the applicability of the General Conformity Rule to the Project, respectively. Appendix G4 contains a copy of the revised General Conformity analysis.

F205-2
Impact AIR-4 and Impact AIR-5 in Section 4.6.4 have been revised to provide specific information regarding the Applicant's emissions reduction programs and their review by the USEPA and the California Air Resources Board (CARB). As part of air permit-to-construct application procedures, the Applicant has committed to the USEPA to achieve emissions reductions (in addition to reductions inherent to the Project) to an amount equal to the FSRU's annual NO_X emissions. The Applicant has executed contracts to retrofit two marine vessels (long haul tugs) by replacing the propulsion engines of each vessel with modern low emitting engines (Tier 2 compliant diesel-fired engines). At the request of the USEPA and the CARB, the Applicant conducted source testing to assist in determining the emission reductions expected as a result of the retrofits. Both the USEPA and the CARB have reviewed the results, but there is not yet a consensus on the estimated emission reductions from the mitigation proposal.

Based on the USEPA's and CARB's estimates, the proposed

Emissions Reduction Program (AM AIR-4a) would provide for NO_X emission reductions greater than the estimated annual NO_X emissions from FSRU equipment and estimated NO_X emissions from operation of LNG carrier offloading equipment. However, the total emission reductions would be less than the annual NO_X emissions estimated for all operations (FSRU and Project vessels) in California Coastal Waters, as defined by the CARB. According to CARB, the emission reduction proposal "represents more than what would otherwise be required by the current determination of applicable regulations."

Appendix G9 contains a memorandum from the CARB to the CSLC on this topic. Electronic copies of the Applicant's reports submitted to the USEPA that detail the tug retrofits and related emission reductions are available at www.epa.gov/region09/liq-natl-gas/cabrillo-air.html.

RDEIR. Mitigation measure AM AIR-4a should be revised to reflect this new information. Specifically, BHP has entered into contracts to retrofit two marine vessels (long haul tugs) by replacing two propulsion engines and two auxiliary engines with modern low emitting engines (Tier 2 compliant diesel fired engines). BHP currently estimates that the repowering of one Sause Brothers tug could result in emission reductions of approximately 123 tons per year of NOx, and the repowering of one Olympic tug and Barge tug could result in emission reductions of approximately 96 tons per year. However, EPA has not yet completed its own analysis of emission reductions to be expected from retrofitting these two marine vessel engines.

Water Resources

National Pollutant Discharge Elimination System (NPDES) Permitting

With regards to the potential effects of the proposed discharges from the Cabrillo Port, the conclusions of the RDEIR are similar to the previous Draft EIS/EIR, namely that the discharges would generally not have significant environmental effects. We noted in our previous letter that some of the volumes and descriptions of the discharges in the Draft EIS/EIR did not match the information in the NPDES permit application. While the RDEIR provides some updated information in this regard, we still have the following concerns:

1) The RDEIR provides a figure of 63,400 gal/week for deck washdown water (p. 2-25, line 3). This figure appears to have come from a letter to EPA dated January 24, 2005. However, the applicant has subsequently provided a revised figure of 264,000 gal/year which should be used instead in the Final EIS/EIR.

2) The RDEIR provides a figure of 142,000 gal/hour for the cooling water discharge (p. 2-28, line 10), which agrees with our NPDES permit application (3.4 MGD). However, Table 4.7-8 and Appendix H1 of the RDEIR use a different figure of 6.34 MGD. This latter figure appears to have come from a letter to EPA dated May 18, 2004 which has since been revised to 3.4 MGD. We recommend use of the 3.4 MGD figure throughout the Final EIS/EIR.

3) The RDEIR provides an estimate of the volume of stormwater (30 gal/min) discharged from the FSRU "when it rains" (p. 2-29, line 13). However, the assumptions behind the estimate such as the size of the rainfall event are not provided. This information should be provided in the Final EIS/EIR.

4) The RDEIR includes volumes of gray water and black water estimated to be discharged (p. 2-36, lines 23 through 36) that are different from those provided to EPA. The figures provided to EPA are 1,368 gal/day for black water and 1,257 gal/day for gray water. The figure in the RDEIR for black water is 90 gal/day and should be updated in the Final EIS/EIR.

F205-2 Continued

F205-2
Continued

F205-3

F205-3
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. A closed loop tempered water cooling system, which recirculates water, would be used instead of a seawater cooling system, except during annual maintenance (four days for the closed loop tempered water cooling system, and four days for the Moss tanks when the inert gas generator [IGG] would be operating).

Because seawater would only be used as non-contact cooling water during these maintenance activities, the volume of seawater used would be greatly reduced. Seawater would also be used for ballast. Section 2.2.2.4 describes the proposed seawater uptakes and uses for the FSRU. Appendix D5 describes seawater intakes and discharges during Project operations, and Appendix D6 describes the closed loop water system and provides thermal plume modeling analysis of discharges from the backup seawater cooling system.

When either the backup seawater cooling system or the IGG are operating, the temperature of the discharged seawater would be elevated above ambient temperatures no more than 20°F at the point of discharge and would be 1.39°F at 300 m from the point of discharge during the worst case scenario. These thermal discharges would comply with the California Thermal Plan (see Sections 4.7.4 and 4.18.4 and Appendix D6).

Impacts to Waters of the United States

The Final EIS/EIR should disclose the Applicant's preferred water crossing method for each onshore pipeline location and the range of alternative crossing methods that could be employed at the location. The method that results in the least environmental damage or impact to each specific aquatic resource location should be identified. Additionally, for each location where an aquatic resource could potentially be affected by the proposed project, provide a description of the type of activity that would result in the impact, provide a list of potential avoidance and minimization measures that can be employed at this specific site. We note that the Clean Water Act (CWA) Section 404(b)(1) Guidelines (40 CFR Part 230) provide that all waters of the United States must be avoided, and impacts minimized and offset, regardless of the appearance of special status species.

F205-4

Installation of the pipeline, either by Horizontal Directional Drilling (HDD) or trenching, will result in the creation of excavated materials. For the shore crossing HDD activity, the RDEIR states that a drilling fluids confinement pit would be constructed but it does not address how all excavated materials from the HDD operation would be handled or the disposal location(s) of these materials. The Final EIS/EIR should include the specific details for the handling, transport and disposal of all materials, including drilling muds, created from the HDD operations. This should include a discussion on the ultimate disposal location(s) for all excavated materials from the proposed project.

F205-5

The RDEIR indicates that four offshore alternative sites were eliminated from further consideration as they were located within the Channel Islands National Park (page 3-17) and the Channel Islands National Marine Sanctuary (CINMS), and unlikely to be determined to be consistent with the intended uses of these areas. The RDEIR (e.g., Figure ES-3, Figure 1.0-1) indicates that the proposed action may occur within the boundaries of the CINMS. Pages ES 35 and 36 also note that the CINMS is currently preparing a supplemental EIS to evaluate boundary changes to the CINMS. It notes that the FSRU is located within some of the areas included in the boundary changes and that the siting of the FSRU would preclude these boundary expansions. This is a cumulative impact to the area that should be addressed in the Final EIS/EIR.

F205-6

Impacts to Environmental Justice Communities

EPA is concerned that the potentially affected population has not been clearly defined. Table 4.19.2 shows the total number of individuals along the Center Road Pipeline and Alternatives 1, 2 and 3, but the text does not explain how the total number of individuals was calculated (due to census blocks that intersect the pipeline route or census blocks that intersect a buffer of 824 feet from the pipeline route).

Page 4.19-6, line 8 states that "the detailed census block analysis of ethnic composition of the population focuses only on the Hispanic and Latino population along the Center Road Pipeline proposed route." Although the analysis of city of Oxnard showed that only the Hispanic and Latino populations exceeded the values for the

F205-7

F205-4
Tables 4.18-5 and 4.18-6 in Section 4.18 (Water Quality) describe crossing methods, both proposed and alternate, for each waterbody on the proposed Center Road Pipeline and the proposed crossing methods for the Line 225 Pipeline Loop.

F205-5
The project has been modified and horizontal directional boring would be used for the shore crossing instead of horizontal directional drilling. As discussed in Section 2.6.1, "[a]t the conclusion of HDB drilling, any excess drilling fluid and spoils that are collected through the HDB return system would be disposed of in accordance with Federal, State, and local regulations. During initial Project evaluation, the Applicant or its contractor would test to determine whether any contaminants exist along the HDB drilling path. Subsurface samples would be collected every 500 to 1,000 feet (152 to 305 m) along the path and analyzed for heavy metals, total petroleum hydrocarbons, volatile organic compounds, and semi-volatile organic compounds. If elevated levels of any of these contaminants were detected in the samples, the excess drilling fluid and spoils would be disposed of at a licensed hazardous waste facility. If no contamination were detected, the material would be disposed of at a conventional approved disposal site according to Federal, State, and local regulations."

F205-6
The cited text refers to potential onshore locations within the Channel Islands National Park, and the cited figure indicates the CINMS Study Area only. Siting the FSRU would not automatically preclude the Channel Islands National Marine Sanctuary (CINMS) from expanding its boundaries. The FSRU would be located outside of the current boundary of the CINMS, and vessels associated with Cabrillo Port operations would not be expected to enter the CINMS. Section 4.13.1.1 contains updated information on the status of the CINMS Management Plan; the CINMS Draft Management Plan/Draft EIS was released in May 2006. Sections 4.7.1.4, 4.13.2.2, and 4.20.1.5 contain additional information on the potential expansion of the CINMS boundary, which is not proposed at this time.

As stated in Section 4.13.1.1, "The National Marine Sanctuaries Act allows for variations on how restrictively each sanctuary is managed and allows for a variety of recreational and commercial activities. The existing CINMS boundaries and all of its proposed alternative boundaries include parts of the commercial vessel traffic separation lanes. According to CINMS staff, installation of the FSRU and pipelines at the proposed location is not inconsistent

with the Sanctuary and would not automatically preclude the CINMS from expanding its boundaries. However, the potential presence of the FSRU, together with the results of the biogeographical assessment, would be considered by the CINMS when making a final decision on the expansion of its boundaries."

F205-7
Table 4.19-2 was formulated using census block information for those census blocks that intersect the pipeline route and its buffer. As stated in Section 4.19.1.1, Minority Population, "It should be noted, however, that because of the often irregular sizes and shapes of census blocks, not all residents included in each block live in close enough proximity to the proposed pipeline route to be impacted."

Block-level census data were reviewed and no other minority communities were identified that exceeded the numbers of the reference community. Table 4.19-3a has been added to Section 4.19 to show more of the census data reviewed regarding minority communities.

Section 4.19.1.2 discusses a review of census block group data from the 2000 Census addressing poverty rates along the Center Road Pipeline Route. This section states that the residents along the route could have a relatively higher level of poverty than the reference communities. Section 4.19.4 contains information on potential disproportionate impacts on low-income populations.

F205-7 Continued

F205-7 Continued

reference community, a detailed census block analysis of all racial and ethnic groups might reveal additional pockets of minority communities along the pipeline routes. EPA recommends that this section be revised to include a detailed census block analysis for each racial and ethnic group for all of the potential pipeline routes. Also, a detailed census block analysis should be conducted to identify potential pockets of low-income populations for all of the pipeline routes.

Pages 4.19-7 and 4.19-8, Table 4.19-3 shows 19 census blocks affected by the Center Road Pipeline Route where the percentage of Hispanic or Latino individuals exceeds the percentage for the State of California. Page 4.19-16, states that "During onshore pipeline operations, potential impacts may occur from a release of natural gas from a leak or pipe rupture at any point along the pipeline route...The long-term potential safety impacts associated with the operation of this transmission line (the potential for a release of natural gas from a leak or rupture of the pipeline followed by ignition and burning of the gas cloud) represents an environmental justice concern." However, mitigation is only proposed for 2 (Block 1019 of Census Tract Number 47.02 and Block 2012 of Census Tract Number 47.04) of the 19 minority census blocks. The Final EIS/EIR should discuss potential mitigation measures for the other 17 census blocks with identified minority communities.

Section 4.20.3.19 only discusses cumulative impacts to the identified minority and low-income populations due to other pipeline projects. However, environmental justice communities are concerned about all environmental burdens which can potentially affect their communities.[2] EPA recommends that a table be added to this section which lists all of the cumulative impacts discussed in Section 4.20, Cumulative Impacts, that potentially affect the identified minority and low-income populations along the proposed pipeline routes. The RDEIR states that the Crystal Energy project would include pipelines that also traverse the City of Oxnard, Ventura County, and the City of Santa Clarita (Section 4.20.3.18). This is the only other project referenced in this section that addresses the cumulative impacts affecting the environmental justice community.

There are other past, present, and reasonably foreseeable future projects or actions that may contribute to cumulative impacts to the environmental justice community. *Cumulative risk*, as defined by EPA, is "the cumulative risks from aggregate exposure to multiple agents for stressors." Examples of possible sources of stress include the existing gas pipeline network, abandoned hazardous waste sites, power plants and other permitted facilities, and urban runoff.

Mitigation Measures

As we previously commented on the Draft EIS/EIR, the analysis discusses direct and indirect impacts under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), and defines four categories of impacts

[2] Ensuring Risk Reduction in Communities with Multiple Stressors: Environmental Justice and Cumulative Risks/Impacts. National Environmental Justice Advisory Council. December 2004. Available at: http://www.epa.gov/compliance/resources/publications/ej/nejac/nejac-cum-risk-rpt-122104.pdf

(Classes I - IV). A Class III impact is considered to be an adverse impact that does not exceed an issue's significance criterion (significance criteria are defined for each resource in Chapter 4, Environmental Analysis).

NEPA requires that mitigation measures be discussed for all impacts, even those that by themselves would not be considered significant.[2] However, there are 15 Class III impacts among 10 resources analyzed in Chapter 4 that do not have any mitigation measures proposed for them. The 10 resources are Aesthetics (1), Air Quality (1), Biological Resources - Marine (4), Geological Resources (1), Hazardous Materials (1), Noise (1), Recreation (1), Socioeconomics (3), Transportation (1), and Water Quality and Sediments (1). The Final EIS/EIR should discuss mitigation measures for all adverse impacts disclosed in Chapter 4, including the 15 Class III impacts that have no measures proposed in the RDEIR.

Editorial Clarifications

The Final EIS/EIR should make the following clarifications:

1) We note that BHP has submitted revised emissions estimates to EPA, and thus the air emissions data in the Final EIS/EIR may need to be updated. The revised estimates submitted by BHP were corrected for errors and contained new information on the engines they plan to utilize.

2) In estimating the emission potential of the equipment onboard the FSRU, page 4.6-14 of the RDEIR states an assumption that no more than five submerged combustion vaporizers (SCVs) will be operated simultaneously. According to the air permit application submitted to EPA in December 2005, BHP intends to operate the equivalent of four SCVs at 100% load (see page 2-4, for example), which could equate to the use of all eight SCVs at 50% load. The Final EIS/EIR should clarify this discrepancy.

3) The description of how EPA has applied state air regulations at page 4.6-18, lines 24 to 27 is incorrect. EPA suggests that the Final EIS/EIR state the following:

...This law further stipulates that these Project activities would be subject to all Federal rules and regulations and to those of the "nearest adjacent coastal state." The state of California has created local air pollution districts and pursuant to California Health & Safety Code, Division 26, Part 3, each district establishes and enforces local air pollution regulations in order to attain and maintain all state and federal ambient air quality standards. The districts permit and control emissions from stationary sources of air pollution.

[2] See 40 CFR 1502.16(h), Section 1505.2(c), and CEQ Forty Questions No. 19(b). See also EPA's comment on "Mitigation and Pollution Prevention" in our March 31, 2004, scoping letter on the project's Notice of Intent.

F205-8

F205-9

F205-10

F205-11

F205-8
MARAD and the USCG consider Class III impacts to be minor, short-term, or temporary impacts that under NEPA do not require mitigation. Project design elements contain features that would typically be considered mitigation measures.

F205-9
The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. Section 4.6.1.3 contains revised emissions from Project construction and operations. These emission estimates incorporate proposed Project changes and data submitted to the USEPA as part of the air permit application. Appendices G1 and G2 include the assumptions and emission factors used to calculate emissions.

F205-10
Section 4.6.1.3 contains additional information on the proposed operation of the submerged combustion vaporizers (SCVs). Appendix G1 includes the assumptions used to calculate emissions from the SCVs.

F205-11
Revisions to Section 4.6.2 clarify the USEPA's determination that the Ventura County Air Pollution Control District portion of California's State Implementation Plan contains the applicable air permitting regulations of the nearest adjacent coastal State, as required under the Deepwater Port Act.

To apply the applicable law of California with respect to air pollution therefore requires a determination of the appropriate air pollution control district. For this proposed project, EPA has determined that the Ventura County Air Pollution Control District (VCAPCD) portion of the California SIP contains the applicable air permitting regulations of the nearest adjacent coastal State.

4) Page ES-28 of the RDEIR states that EPA determined the Federal Prevention of Significant Deterioration (PSD) regulations would not apply to the Project since potential emissions are below major source thresholds. For clarity, EPA recommends that the Final EIS/EIR additionally state the applicant is required to obtain a pre-construction permit pursuant to Rule 10 of the Ventura County portion of the California SIP.

5) Table 4.6-15 summarizes several major federal, state, and local rules and regulations related to air quality, and discusses the applicability of each with respect to the proposed project. In discussing the applicability of VCAPCD Rule 26 (New Source Review), the RDEIR states, "the *USEPA concluded that Rule 26 does not apply to the FSRU and that emission offsets are not required for Project sources constructed in the area where the FSRU is proposed to be sited (Zimpfer 2005a)".* This is correct in that EPA concluded offsets are not required for the New Source Review permitting of the FSRU, as the FSRU is being permitting in the same manner as sources located in the portion of Ventura County that is designated as attainment under the federal standards. However, EPA wishes to clarify that the project is not exempt from Rule 26 in its entirety, which includes Rules 26.1 through 26.11. Table 4.6-15 should more precisely state that EPA concluded *Rule 26.2* does not apply to the FSRU. A similar revision should be made to page 4.6-33 in the discussion of Impact AIR-4.

6) In discussing project applicability of PSD at page 4.6-20 in Table 4.6-15, it would be more accurate to state "The USEPA has determined that the FSRU is not subject to PSD regulations because the ~~overall function of the~~ FSRU does not meet the definition of one of the 28 named source categories and the Potential To Emit (PTE)..." since fossil fuel boilers could have been part of the FSRU without being part of its overall function.

7) The first sentence under the Air Quality section on page ES-3 at line 24 should clarify that EPA has determined that the FSRU should be permitted in the same manner as sources on the Channel Islands that are part of Ventura County, since there are Channel Islands which are a part of Los Angeles and Santa Barbara counties. A similar revision should be made to Table 4.6-15 on page 4.6-19 of the RDEIR.

8) Table 4.6-15 on page 4.6-19 of the RDEIR states, "Ventura County is classified as a Federal ozone nonattainment area." This table should more accurately state that the *mainland* portion of Ventura County is classified as a

F205-11 Continued

F205-11 Continued

F205-12

F205-13

F205-14

F205-15

F205-16

F205-12
Section 4.6.4 contains revised information on the air permits required for the Project pursuant to Ventura County Air Pollution Control Distict rules.

F205-13
Section 4.6.2 has been revised to clarify that the USEPA has made a preliminary determination that Rule 26.2 is not applicable to the Project, but that the Project is not exempt from Rule 26 in its entirety, specifically that Rule 26.1 through Rule 26.12 apply.

F205-14
Section 4.6.2 has been revised to clarify that USEPA has made a preliminary determination that the FSRU is not subject to PSD.

F205-15
The Excecutive Summary and Section 4.6 have been revised to clarify that the USEPA has made a preliminary determination that the FSRU should be permitted in the same manner as sources on the Channel Islands that are part of Ventura County, as distinguished from those in Santa Barbara and Los Angeles Counties.

F205-16
Section 4.6 contains revisions that clarify the distinctions between mainland Ventura County and the Channel Islands that are included in Ventura County.

Federal ozone nonattainment area since Anacapa Island and San Nicolas Island are also part of Ventura County but are designated as attainment. Similarly, the discussion of the air quality of Ventura County at pages 4.6-3 and 4.6-4 does not specify whether this discussion applies to mainland Ventura (which is nonattainment under the Federal ozone standard) or all of Ventura County, including Anacapa and San Nicholas islands. The Final EIS/EIR should make this clarification, and changes should also be made at page 4.6-19 in Table 4.6-15 in the "Key Elements" discussion of Conformity.

9) The statement on page 4.6-4 (at lines 26-27) should also be reworded to state, "The U.S. Environmental Protection Agency (USEPA) compares ambient air criteria pollutant measurements with NAAQS to assess the status of air quality of regions *within the states of the U.S.* with respect to criteria air pollutants...Based on these comparisons, regions *within the states of the U.S.* and California are designated as one of the following categories."

Additional Information

As noted throughout our comments, BHP has submitted to EPA updated information (on the project's estimated air emissions and the proposed mitigation of air emissions) in the following documents, which are posted to our website for this project at: http://www.epa.gov/region9/liq-natl-gas/cabrillo-air.html, under "Supporting Materials>Materials Originated by Applicant":

1.) Report on Sause Brothers Tug Repowering Project, (May 2, 2006)
2.) Letter to Amy Zimpfer, EPA (April 21, 2006)
3.) Letter to Margaret Alkon, EPA with attachment (April 14, 2006)
4.) Letter to Amy Zimpfer, EPA (April 11, 2006)
5.) Letter to Bob Fletcher, California Air Resources Board, with attachments (April 11, 2006)
6.) Letter to Margaret Alkon, EPA, with attachments (April 7, 2006)

F205-16 Continued

F205-16 Continued

F205-17

F205-17
Section 4.6.1 has been revised to clarify the definition of regions assessed by the USEPA for air quality designations.